Application No. 10/083707
Page 2

Amendment Attorney Docket No. S63.2R-10308-US01

Amendments To The Claims:

1-16. (Cancelled)

17. (Currently Amended) A system for deploying a bifurcated stent assembly to a bifurcation site, the system comprising:

a bifurcated stent, the bifurcated stent having a stent body;
only a single catheter, the single catheter having only a single balloon;
the single catheter being adapted for insertion into a body vessel and advancement
to a bifurcation site along a primary guide wire, the single catheter having at least one stent
retaining region for retaining the a first bifurcated stent body in an unexpanded state thereon,

the first bifurcated stent body comprising a substantially tubular stent wall having a circumferential plane and a plurality of members moveably engaged to the stent wall, the first bifurcated stent body being expandable from an unexpanded state to an expanded state, the single balloon being expandable from an unexpanded condition to an expanded condition, the first bifurcated stent body expanded by the expansion of the single balloon, and a plurality of members moveably engaged to the stent wall, in the unexpanded state the plurality of members being retained substantially within the circumferential plane of the stent wall, in the expanded state a portion of the plurality of members being extended radially outward from the stent wall first stent body to form a scaffold, the scaffold defining a side opening in the stent wall.

- 18. (Cancelled)
- 19. (Original) The system of claim 17 wherein the plurality of members are characterized as being self-expandable, balloon expandable or hybrid expandable.
- 20-38. (Canceled)
- 39. (Currently Amended) The stent delivery system of claim 17 wherein at least a portion of the first stent body bifurcated stent is constructed from a shape-memory material.

Application No. 10/083707
Page 3

Amendment Attorney Docket No. S63.2R-10308-US01

- 40. (Currently Amended) The stent delivery system of claim 17 wherein at least a portion of the first stent body bifurcated stent is constructed from a metal selected from the group consisting of stainless steel, nitinol, Elgiloy, shape-memory material, and any combination thereof.
- 41. (New) The system of claim 17 wherein the single balloon comprises a body region and a bulge region, in the unexpanded state the stent wall being disposed about the body region and the plurality of members positioned over the bulge region.
- 42. (New) The system of claim 41 wherein when the balloon is expanded to the expanded condition the bulge region of the balloon extends the plurality of members radially outward from the stent wall to form the scaffold.
- 43. (New) The system of claim 41 wherein the body region of the balloon has a thickness, the thickness of the body region being greater than the thickness of the bulge region.
- 44. (New) The system of claim 41 wherein the body region of the balloon has a thickness, the thickness of the body region being less than the thickness of the bulge region.